

ABSTRACT OF THE DISCLOSURE

In a sensor unit, an antenna section receives a high-frequency signal transmitted from a positioning system for output to a combining circuit. Also, in the sensor unit, a sensor section detects an angular velocity around one axis, and further detects an acceleration in directions of two axes (that is, X and Y axes). Furthermore, the sensor section uses the detected angular velocity and acceleration to generate a data unit including at least data indicative of the angular velocity and data indicative of the acceleration. The sensor section then performs a digital modulation process with the generated data unit. The combining circuit combines the high-frequency signal output from the antenna section and a digital modulated signal output from the sensor section, and then outputs the resultant composite signal to a coaxial cable.